

TAXONOMY OF THE ORIENTAL GENUS *KERRICHIA* MASON, WITH  
DESCRIPTION OF A NEW SPECIES FROM NEPAL  
(HYMENOPTERA: ICHNEUMONIDAE: TRYPHONINAE)<sup>1</sup>

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*Abstract.*—*Kerrichia* Mason (1962) described from Japan with *K. nipponica* Mason as the type species is here recorded from Taiwan and Nepal. The Nepal record is based on a new species, *K. nepalensis* Gupta. A key is provided to distinguish them.

*Key Words:* Ichneumonidae, Exenterini, *Kerrichia*, taxonomy

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Gupta (1990) published on the taxonomy of the *Kristotomus*-complex of genera which includes *Kristotomus*, *Kerrichia* and *Orthomiscus*. These genera have characters usual for the Exenterini [= Cteniscini of Townes, Townes & Gupta (1961) and others], including middle tibia with only one spur and hind tibia without any spurs, but differ from other Exenterini in the following characters: Apical rim of hind tibia with a fringe of long, close bristles on its inner side, and a flat polished area on the lower and inner sides between the apical fringe of bristles and the tarsal socket; hind tibia being widest at apex and truncate; and ovipositor being short, slender, and tapering or decurved.

*Kerrichia* is similar to *Kristotomus* in many characters, including the mandible shape, dorsolateral carina of petiole, and ovipositor, but is distinguished by its narrow, slender petiole that does not have a glymma (Figs. 1, 3), tarsal claws without

pectination, and the female subgenital plate more strongly sclerotized than in *Kristotomus* and *Orthomiscus* and convexly arched below (Figs. 7-8).

*Kerrichia* was known by the type species, *K. nipponica* Mason from Japan. It is reported here from Taiwan. A new species, *K. nepalensis*, is described from Nepal. A key is provided to distinguish the two species.

Genus *Kerrichia* Mason  
Figs. 1-8

*Kerrichia* Mason, 1962. Canadian Ent., 94: 1287.

Type species: *Kerrichia nipponica* Mason; original designation.

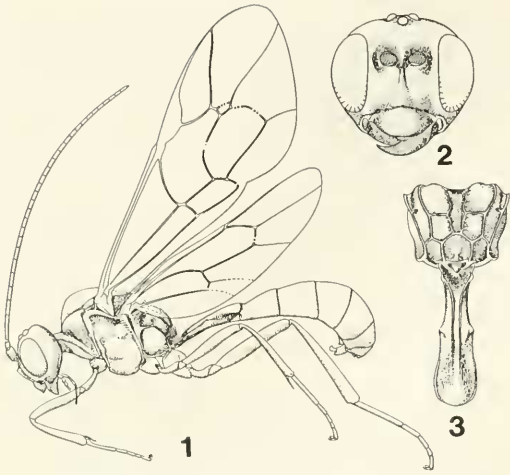
Taxonomy.—Townes, 1969: 183; Gupta, 1990: 8.

Body length 4.2-7.5 mm. Fore wing 4.2-7.0 mm long. Mandible widened and somewhat twisted apically, its lower tooth longer than the upper (Fig. 5). Occipital and hypostomal carinae strong, complete and meeting above base of mandible. Notauli indistinct. Sternaulus indicated anteriorly. Petiole long and narrow, gradually widened toward apex, without glymma (Figs. 3-4). Petiole sternite fused with the tergite and

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Figs. 1-3. *Kerrichia nipponica*, male: 1, habitus; 2, face; 3, propodeum + tergite 1. [After Townes 1969.]

extending up to the level of spiracles. Dorsolateral carina of petiole interrupted by the spiracle (Figs. 4, 6). Tarsal claws without pectination. Ovipositor sheaths short and broad. Female subgenital plate about as long as the length of ovipositor (Fig. 7), scooped or boat-like, strongly sclerotized and convexly arched below (Figs. 7-8).

Egg simple, resembling that of *Orthomiscus*.

#### KEY TO THE SPECIES

- Temple black or narrowly yellow on basal half. Yellow marks on pronotum and scutellum reduced, usually confined along pronotal collar. Meso- and metapleurum black except sometimes with faint yellow line along sternaulus. Abdomen color variable. Male, female. Japan, Taiwan. . . . .  
 . . . . . *K. nipponica* Mason
- Temple yellowish-white to dorsal level of eye (inner frontal orbits also yellowish-white). Lower half of pronotum, apex of scutellum, and small marks on meso- and metapleurum yellowish-white. Abdomen with tergite 3 and onwards usually yellowish-brown. Female. Nepal. . . . .  
 . . . . . *K. nepalensis* new species

#### *Kerrichia nipponica* Mason

Figs. 1-6, 8

*Kerrichia nipponica* Mason, 1962. Canadian Ent., 94: 1287. M, F. key, des., fig.

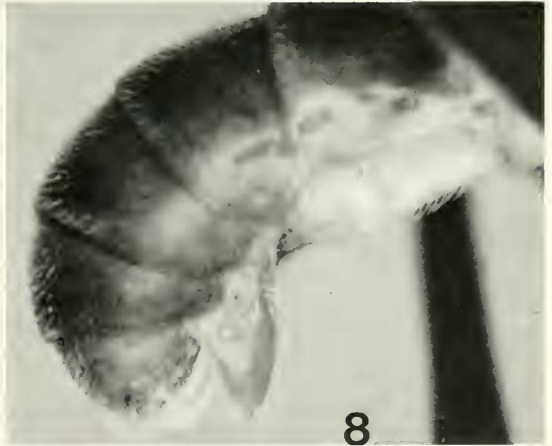
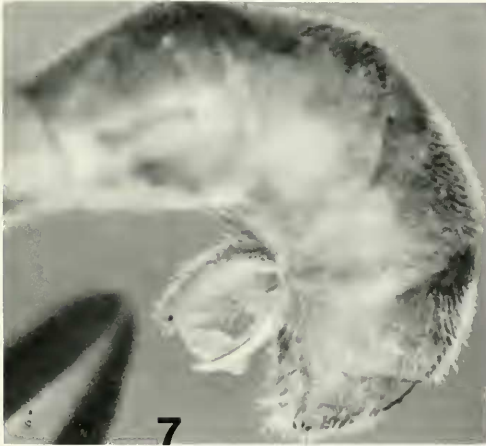
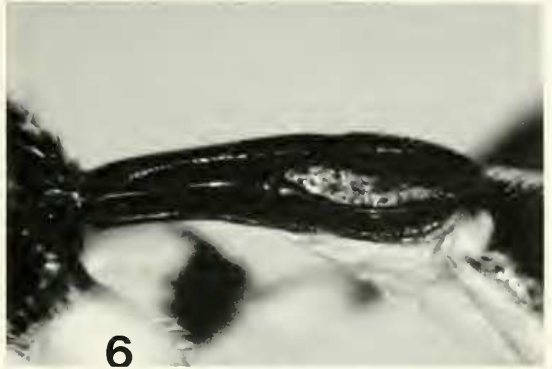
Type: Female, Japan: Nagano Prefecture: Kamikochi (AEI, Gainesville).

Male and female.—Flagellum 26-28 segmented (in one male 32-segmented). First flagellar segment 1.64-1.74× as long as second. Ratio of second and third segment lengths 14:13 or 15:14. Face with well separated punctures. Clypeus with scattered punctures. Frons and vertex polished, except area lateral to ocelli punctate. Malar space about 0.25× as long as basal width of mandible. Temple convex, widened posteriorly, about as wide as eye. Vertex elevated above top of eyes.

Thorax largely smooth, shiny, but with moderately dense hairs. Epomia strong but short. Mesoscutum convex. Propodeum fully areolated but basal area and areola confluent (Fig. 3). Combined areola and basal area about 2.5× as long wide, narrowed towards, and longer than petiolar area. Tarsal claws without pectination but with 2-3 basal bristles. Areolet about 2.0× as wide as high, trapezoidal. Nervulus interstitial or slightly distad of basal vein. Nervellus intercepted at its lower 0.25-0.33.

Abdomen largely subpolished. Postpetiole rugulose. Tergite 2 with sparse punctures which are sometimes more distinct. Tergite 1 2.8-3.3× as long as its maximum width, its spiracles situated at middle, its dorsolateral carina interrupted by spiracle (Figs. 4, 6), its dorsolateral carinae variously extending on postpetiole. Ovipositor sheaths very short. Ovipositor short, decurved. Female subgenital plate long, convex, boat-like (Fig. 8).

Color.—Head and thorax largely black with face, clypeus, mandibles, malar space, and lower temple, yellow. Pronotal collar, hind corner of pronotum, tegula, subtegular ridge, and sometimes pronotal margins and mesepisternum, yellow. Some males with yellow irregular marks on mesopleurum. All coxae and trochanters largely yellow. Hind coxa blackish apically. Fore and middle femora, tibiae and tarsi yellowish-brown, their dorsal aspects often brownish. Hind



Figs. 4-8. *Kerricha nipponica*: 4, propodeum and tergite 1 of holotype female; 5, face and mandible of paratype male; 6, tergite 1 of Taiwan female; 8, apical abdominal segments and subgenital plate of Taiwan female; 7, *K. nepalensis*, apical abdominal segments, ovipositor and subgenital plate.



femur, tibia and tarsus brownish to brownish-black. Apex of scutellum brownish or reddish-brown. Petiole black with an apical yellow spot. Tergite 2 largely black or blackish-brown with gastrocoeli and apical 0.2 yellow. Tergite 3 similar to tergite 2 or largely yellowish-brown with an apical yellow band, or yellowish-brown with diffused black marks basally. Rest of abdominal tergites usually yellowish-brown, particularly in females, or basally blackish, particularly in males.

Egg.—Simple, egg stalk short and sub-apical, anchor small.

Variation.—There is considerable variation in coloration, particularly the extent of yellow on the temple and black on the abdominal tergites. Specimens from Japan have temple narrowly yellow along the lower half of the outer eye margin and tergites 2 and 3 black, or blackish basally with yellow apical margins. Tergites 3–5 are yellowish-brown with yellow apical margins. Some males have all tergites brownish with yellow apical margins. The hind leg is also darker than in specimens from Taiwan.

Specimens from Taiwan have two types of color pattern: (1) Temple black except near malar space, abdomen beyond tergite 2 yellowish-brown, and hind femur and tibia light brownish. These specimens have tergite 2 a little more strongly punctate and the petiole appears comparatively stouter. (2) Temple narrowly to broadly yellow in lower half, abdominal tergites brown basally with yellow apical margins, at least tergites 2 and 3, and hind femur and tibia dark brown. These specimens have sparse punctures on tergite 2 (like the typical specimens from Japan), and the petiole is slender. Specimens of the latter color form are from higher elevations in Taiwan, although the higher elevation forms usually are more melanic.

Length.—4.2–7.5 mm; fore wing 4.2–7.0 mm; ovipositor 0.3–0.4 mm.

Specimens examined.—10 males and 8 females. JAPAN: Nagano Prefecture: Ka-

mikochi, 1 female (holotype), 26.VII.1954, and 4 males (paratypes), 22 to 24. VII. 1954, Townes family (AEI, GAINESVILLE). TAIWAN: Nantou Hsien: Feng Huang Ku, 1000 m, 1 female, 15.IV.1978; Tungpu, 1000–1200 m, 1 male, 2 females, 28.IV–2.V.1981, 19–23.VII.1982, 22.VII.1982, L. Y. Chou, T. Lin, C. J. Lee; Meifeng, 2150 m, 1 female, 24–26.VI.1981, K. S. Lin & W. S. Tang; Tsuifeng, 2300 m, 1 male, 1 female, 3.VI.1980, 5–9.VIII.1981, L. Y. Chou, S. C. Lin, C. C. Chen; Hose, 100 m, 2 males, 22.VII.1982, L. Y. Chou & T. Lin; Taiheizan (Taipingshan), 1 female, 26.VII.1923, J. Sonan; Chiayi Hsien: Alishan, 2400 m, 1 female, 5–9.VIII.1981, L. Y. Chou & S. C. Lin (TARI, WUFENG). Taiwan: Wushe, 1 male, 3.V.1983, and 1 female, 26.IV.1983, H. Townes (AEI, GAINESVILLE).

Distribution.—Japan, Taiwan.

*Kerrichia nepalensis* Gupta,

NEW SPECIES

(Fig. 7)

Female.—Structurally similar to *K. nipponica*, and differing as follows: Flagellum 28 segmented. First flagellar segment  $1.73 \times$  as long as the second. Second and third segments of equal length. Face comparatively more shallowly punctate. Nervellus intercepted at lower 0.15. Nervulus and nervellus more inclivous. Areolet about  $1.5 \times$  as long as wide. Ovipositor and subgenital plate as in Fig. 7.

Color.—Black with yellowish-white markings on head and thorax, and abdomen beyond tergite 2 orange-yellow. Temple yellowish-white to dorsal level of eye. Inner frontal orbits also yellowish-white. Lower half of pronotum, hind corner of pronotum, propleurum, tegula, subtegular ridge, apex of scutellum, and small marks on meso- and metapleurum yellowish-white. Coxae, trochanters, and bases of fore and middle femora yellowish-white. Hind coxa with apical black marks. Fore and middle femora and tibia yellowish-brown, their tarsi darker.

Hind femur, tibia and tarsus brownish. Tergite 1 black with area around spiracle and apex yellow. Tergites 2 orange-yellow and with brownish tinge on basal 0.6, its apical margin broadly yellow. Tergite 3 and onwards orange-yellow with their apical margins narrowly yellow.

Egg.—As seen on ovipositor (Fig. 7), slender, about  $2.5\times$  as long as wide.

Male.—Unknown.

Length.—5.6 mm; fore wing 5.2 mm; ovipositor 0.32 mm.

Holotype.—Female, NEPAL: Kathmandu Valley: Phulchowki, 7300 ft. (2225 m), 27.VII.1967, Malaise trap, Canadian Nepal Expedition (CNC, OTTAWA).

Distribution.—Nepal.

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